IN THE SPECIFICATION

Please replace the paragraph beginning at page 2, line 4, with the following rewritten paragraph:

An emitter electrode pad on the surface of the semiconductor chip 8 is electrically connected to the emitter wiring pattern 71 by aluminum bonding wires 91, and a gate electrode pad is electrically connected to the gate wiring pattern 73 by an aluminum bonding wire 92. In addition, an emitter terminal 10, a collector terminal 11 and a gate terminal 12 which are made of copper are respectively soldered through solders 13 to the emitter wiring pattern 71, the collector wiring pattern 72 and the gate wiring pattern 73 and are erected upwards. Heads of the emitter terminal 10, the collector terminal 11 and the gate terminal 12 are protruding from the outer surface of the terminal cap 3, which supports and fixes the emitter terminal 10, the collector terminal 11 and the gate terminal 12. Moreover, in order to shield the semiconductor chip 8 from outside air, it is filled with a silicon resin 14, and an epoxy resin 15 is filled onto this silicon resin 14.

Please replace the paragraph beginning at page 2, line 17, with the following rewritten paragraph:

The semiconductor power modules used to control the system of driving the electric locomotive are required for the high reliability under the severe conditions of higher temperatures and higher humidities. The above mentioned conventional plastic IGBT module has the structure sealed with the silicon resin 14 or the epoxy resin 15. However, since this resin seal is of semi-seal structure, the conventional plastic IGBT module is of an incomplete sealed structure. Thus, the conventional plastic IGBT module is weak in moisture resistance. So, under the environment of the high temperature and the high humidity, water

permeates into the module to thereby cause the performance deterioration of the semiconductor chip 8. This is undesirable in view of the reliability of along time as the semiconductor power module for the electric locomotive. In addition, there may be a possibility that impurities (sodium (Na), chromium (Cr) and the like) will gradually be doped in the silicon resin used for the resin sealing. This impurities will invade the semiconductor chip 8 during the long operation. This results in a problem that the reliability may drop ~~be dropped~~.

Please replace the paragraph beginning at page 6, line 35, with the following rewritten paragraph:

The third feature of the present invention pertains to a large scale module comprising a plurality of semiconductor power modules. Here, as the semiconductor power module, it is possible to use the semiconductor power module described in the above mentioned first and second features of the present invention. Namely, the large scale module of the third feature comprises: a heat sink; a metallic flame having a plurality of openings disposed on the heat sink; a plurality of semiconductor power modules disposed on the heat sink so as to be mounted in the openings; a plurality of sealing members disposed between the respective semiconductor power modules and the metallic frame; a plastic cover for covering one surface of the metallic frame on which the semiconductor power module is mounted; and a resin filled into the cover.

Please replace the paragraph beginning at page 9, line 34, with the following rewritten paragraph:

As shown in Figs. 2B, 2C and 2D, a copper plate 331 is bonded to the top surface of the ceramic substrate 31, and a copper plate 332 is bonded to the bottom surface thereof, by

the brazing, such as the silver brazing, the aluminum brazing or the like, respectively. The flange 32 is bonded to the outer side of the copper plate 331 at the boundary of and on the top surface of the ceramic substrate 31, similarly by the brazing, such as the silver brazing, the aluminum brazing or the like. Such brazing is conducted based on "an activated metallizing method" using surface catalyst, such as titanium (Ti) and the like. Such brazing enables the bonding interfaces between the ceramic substrate 31 and the copper plate 331, 332 and between the ceramic substrate ~~31and~~ 31 and the flange 32 to be bonded under excellent ~~excellently~~ mechanical strength. As a matter of fact, brazing layers each having a thickness of 2 to several microns are present on the respective bonding interfaces between the ceramic substrate 31 and the copper plates 331, 332 and between the ceramic substrate 31 and the flange 32. However, the explanations thereof on Figs. 2B, 2C and 2D are omitted to avoid cluttering up the drawing.

Please replace the paragraph beginning at page 11, line 3, with the following rewritten paragraph:

Although, on every bottom ~~bottoms~~ surface of emitter pedals (conductive electrode pedals) 361 to 364, the plurality of metallic hemispheres 366 are attached to be pressure-contacted with the emitter electrode pads in Fig. 2F, it is possible to employ the emitter pedals having flat bottom surfaces. In this case, we should prepare copper (Cu) foils, each having the plurality of metallic hemispheres. Then the copper foils are respectively sandwiched between the emitter pedals having the flat bottom surfaces and emitter electrode pads, and the copper foils are pressure-contacted to the respective emitter electrode pads by employing the similar spring force applied on the top surface of the emitter pedals.

Please replace the paragraph beginning at page 12, line 11, with the following rewritten paragraph:

According to the first embodiment of the present invention, the lower end of the flange 32 is brazed to the ceramic substrate 31, and the upper end thereof is brazed to the ceramic housing 38 through the member 39 made of the metal with the low thermal expansion coefficient that is welded and connected to the flange 32, and thereby the hermetically sealed space is created. Moreover, the penetration holes of the collector conductive pillar 40, the emitter conductive pillar 41 and gate conductive pillar 45 which project above the ceramic housing 38 are air-tightly blocked with the cap-shaped external collector electrode 42, the cap-shaped external emitter electrode 43 and the cap-shaped external gate electrode 44 by the brazing. Thus, a container has an extremely high air-tightness of about 10^{-8} Pa • m^3/sec (10^{-9} atm • cm^3/sec) to 10^{-10} Pa • m^3/sec (10^{-11} atm • cm^3/sec). Accordingly, this can make the moisture resistance very ~~higher~~ high, and perfectly prevent humidity, corrosive gas and the like from invading the container and also prevent the trouble of the four semiconductor chips 351 to 354. Hence, this can extremely improve the reliability.

Please replace the paragraph beginning at page 16, line 25, with the following rewritten paragraph:

As shown in Fig.4, a plastic cover 54 is adhered and bonded to the upper portion of the screw stop flange 51 through a resin based adhesive 74 and the like. This plastic cover 54 covers semiconductor power modules 81 to 84. That is, six screws (not shown) penetrate the six screw stop holes 61 to 66 shown in Fig. 5, respectively. Then, the flange (metallic frame) 51 ~~5~~ is fixed on a large heat sink 60 with the screws. Accordingly, the plastic cover 54 pushes down the semiconductor power modules 81 to 84 at a constant pressure. As a result,

the semiconductor power modules 81 to 84 are pushed against the heat sink 60 and fixed therein. For example, as these four small semiconductor power modules 81 to 84, the semiconductor power module shown in ~~Figs.3A~~ Figs. 3A and 3B in accordance with the second embodiment of the present invention can be employable. As shown in Fig.4, sealing members or sealing rubbers (sealing rings) 53 are mounted in and under the protruding tongues of the openings 52, the sealing members (the sealing rubbers) 53 are positioned between the outer edges of the semiconductor power modules 81 to 84 and the protruding tongues of the flange 51, respectively. Thus, the inside of the plastic cover 54 is hermetically sealed by the fact that the protruding tongues of the flange 51 pushes down the outer edges of the semiconductor power modules 81 to 84 through the sealing members (the sealing rubbers) 53.

Please replace the paragraph beginning at page 17, line 9, with the following rewritten paragraph:

An outer emitter electrode 57, an outer collector electrode ~~38~~ 58 and an outer gate electrode (not shown in Fig. 4) are positioned over the plastic cover 54 as electrodes of the large scale module according to the third embodiment of the present invention. The semiconductor power modules 81, 82, ...may comprise the ceramic substrate 31, a plurality of semiconductor chips having the IGBTs mounted on the ceramic substrate 31 and the flange 32 surrounding the periphery of the semiconductor chips, similarly to the first or second embodiments. The IGBT emitter electrodes 36 disposed on the ceramic housings 38 over the semiconductor power modules 81, 82, ...are connected in parallel to each other through conductive materials 55. And the IGBT collector electrodes 32 doubling as the flange 32 are connected in parallel to each other through another conductive materials 56. Although not shown in the figure, the IGBT gate electrodes disposed on the ceramic housing over the

semiconductor power modules 81, 82, ...are connected in parallel to each other through another conductive materials. These conductive materials 55, 56 are bonded to the upper portion of the plastic cover 54 and connected to the outer emitter electrode 57 and the outer collector electrode 58. Moreover, the inside of the plastic cover 54 is filled with a gelled silicon resin 59, epoxy resin or the like, in order to make the mechanical strength and the insulation strength higher.

Please replace the paragraph beginning at page 18, line 11, with the following rewritten paragraph:

For example, the suburban train requires the large scale module having the rated specification of the 800A, 3300 V class or the 1200A, 3300V class. The long-distance high speed trains require the larger operating voltages, namely "the Shinkansen" super express train in Japan demands the large scale module having the rate specification of the 1200A, 4500V class. On the other hand, "the *ICE*" train in Germany / Switzerland and "the TGV" train in France require higher voltage type large scale module having the rated specification of the 1200A, 6500V class. In the large scale module according to the third embodiment of the present invention, it is possible to adjust the number of semiconductor power modules to be mounted in the metallic frame and to select the best combination of the series connection and the parallel connection to thereby change the maximum power handling capability and the maximum operating voltage of the large scale module, without wasting further time and efforts. And further, it is easy to ~~response~~ respond rapidly to the various specifications requested by different users and the design changes, without requiring further increase of manufacturing cost.

Please replace the paragraph beginning at page 19, line 7, with the following rewritten paragraph:

As shown in ~~Figs.6A~~ Figs. 6A and 6B, a copper plate 331 having a large diameter similar to that of the second embodiment is bonded to the semiconductor power module according to another embodiment of the present invention. Moreover, a flange 32 is bonded onto this copper plate 331 with the brazing. Bottom surfaces of semiconductor chips 351, 352 are soldered to this copper plate 331 through solders 341, 342, respectively. The copper plate 331 serves as a collector electrode wiring portion of IGBT. In addition, the flange 32 made of metal with low thermal expansion coefficient is electrically bonded to the copper plate 331. However, differently from the second embodiment, the flange 32 does not function as the collector electrode of the semiconductor power module. Separately, a dedicated cap-shaped external collector electrode 42 made of copper is prepared and uprightly bonded ~~onded~~ on a ceramic housing 38 with the brazing, as shown in ~~Figs.6A~~ Figs. 6A and 6B. This structure of the external collector electrode 42 is similar to that of the first embodiment of the present invention. That is, a collector conductive pillar 40 made of copper is uprightly erected near the center of the copper plate 331. Then, this collector conductive pillar 40 penetrates a backbone 36 of an emitter electrode member, and further penetrates the ceramic housing 38 and projects towards external portion. This collector conductive pillar 40 is connected to the external collector electrode 42 with the calking. The structure of an external emitter electrode 43 and an external gate electrode 44 are similar to those of the first and second embodiments. Thus, the explanation thereof is omitted.